NATURAL ENVIRONMENT & HAZARDS ELEMENT

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INTRODUCTION

Hazardous conditions due to human activity, such as noise and air pollutants can impact community safety and quality of life. Los Altos seeks to minimize the hazards associated with human activities. The Natural Environment & Hazards Element establishes goals, policies, and a plan for that purpose.

Purpose of the Natural Environment & Hazards Element

The purpose of the Natural Environment & Hazards Element is to identify and address those features or characteristics in or near the City's planning area, which represents a potential hazard to the people in Los Altos. Goals and policies in the element are intended to protect the community from deteriorating quality of life resulting from hazards relating to human activity

Scope and Content of the Natural Environment & Hazards Element

The Natural Environment & Hazards Element of Los Altos satisfies the requirements of the state-mandated Noise Element. Air quality is also addressed to comply with the requirements of the Bay Area Air Quality Management District (BAAQMD) standards.

As specified in Government Code Section 65302(f), the Noise Element must identify and appraise noise problems in the community to ensure acceptable levels of noise exposure. Existing (baseline) and future noise conditions are quantified as noise exposure contours. This information serves as the basis to develop guidelines for compatible land uses.

The element is comprised of four sections: 1) Introduction, 2) the Natural Environment & Hazards Plan; 3) Issues, Goals and Policies; and 4) Implementation Programs Appendix. The Plan provides background information and explains how the goals and policies will be achieved and implemented. In the Issues, Goals and Policies section, hazards associated with human activity are identified and related goals and policies are established to address these issues. The goals, which are overall statements of the community's desires, are comprised of broad statements of purpose and direction. The policies serve as guides for determining acceptable risks/impacts, regulating development in reducing or avoiding adverse effects, and ensuring land use compatibility. The Natural Environment & Hazards Implementation Programs Appendix identifies the specific implementation programs for this element.

Related Laws Plans and Programs

There are a number of existing plans and programs that directly relate to the goals of the Natural Environment & Hazards Element. Enacted through state and local action, these plans and programs are administered by agencies with responsibility for their enforcement.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) was adopted by the state legislature in response to a public mandate for a thorough environmental analysis of projects that might adversely affect the environment. The provisions of the law, review procedure and any subsequent analysis are described in the CEQA Statutes and Guidelines as amended in 1998. Safety hazards, as well as noise and air quality impacts are recognized as environmental impacts under CEQA.

California Noise Insulation Standards

The California Commission of Housing and Community Development officially adopted noise insulation standards in 1974. Revised in 1988, the standards established an interior noise standard of 45 dBA for residential space (CNEL or Ldn). Acoustical studies are required for residential structures proposed within noise contours of 60 dBA or greater from industrial or transportation noise sources to demonstrate compliance with interior noise standards.

Uniform Building Code

The Uniform Building Code includes Sound Transmission Control standards for building construction under Appendix 12, Division 2/2a.

Los Altos Noise Control Ordinance

The City's Noise Ordinance (adopted as part of the Municipal Code) establishes interior and exterior noise standards for daytime and nighttime hours by zoning district, identifies prohibited acts relative to noise, including maximum noise levels for mobile and stationary noise sources, and special exemptions. Noise Ordinance requirements are identified in this Element.

Federal Clean Air Act

The Federal Clean Air Act established National Ambient Air Quality Standards (NAAQS) in 1970 for six pollutants: carbon monoxide, ozone, particulates, nitrogen dioxide, sulfur dioxide, and lead. The Act requires states with air pollution that exceeds the NAAQS to prepare air quality plans demonstrating how the standards would be met (State Implementation Plans SIPs). In 1990, amendments to the Act established categories of severity for non-attainment areas ("marginal" to "extreme"). In 1994, the California Air Resources Board adopted a revised State Implementation Plan for ozone to meet the requirements of the 1990 amendments.

California Clean Air Act

The California Clean Air Act (CCAA) was enacted in 1988 requiring attainment of California's ambient air quality standards. Amended in 1992 and 1996, the state's ambient air quality standard are more stringent than the national standards. In general, the CCAA requires regions whose air quality exceeds state standards to reduce pollutants by five percent or more per year, or to implement all feasible measures to meet the state air quality standards as expeditiously as possible.

Relationship to Other General Plan Elements

According to state planning law, the Natural Environment & Hazards Element must be consistent with the other General Plan elements. While all elements are interdependent, they are also interrelated to a degree. Certain goals and policies of each element may address issues that are primary subjects of other elements. This integration of issues throughout the General Plan creates a strong basis for the implementation of plans and programs and the achievement of community goals. The Natural & Hazards Element is most directly related to Land Use, Housing, and Open Space, Conservation & Community Facilities Elements.

NATURAL ENVIRONMENT & HAZARD PLAN

Noise

In Los Altos, the predominant source of noise is transportation-related noise from vehicle and truck traffic on the City's road system. Commercial noise sources in Los Altos are not significant enough to warrant identification as significant stationary noise sources. In order to minimize impacts associated with transportation-related noise sources, residential development and redevelopment proposed within areas where a noise of 60 dBA is or will be exceeded should conduct acoustical analysis to ensure compliance with the City's noise level standards.

Noise is generally defined as unwanted sound – unwanted being dependent on when and where the sound occurs, what the listener is doing, characteristics of the sound, and how intrusive it is above background sound levels. Noise hazards are a function of increasing mechanization, with noise being principally produced by machines for transportation and production. In Los Altos, traffic movement on the City's road system is the predominant source of noise.

Noise levels are measured on a logarithmic scale in decibels which are then weighted and added over a 24-hour period to reflect not only the magnitude of the sound but also its duration, frequency, and time of occurrence. In this manner, various acoustical scales and units of measurement have been developed such as equivalent sound levels (Leq), day-night average sound levels (Ldn) and Community Noise Equivalent Levels (CNEL).

These measurements become the basis for setting acceptable standards at sensitive noise receptors and identifying potential noise generators. The State of California Office of Noise Control, in its Land Use Compatibility Standards table (), defines an outdoor level of Ldn 60 dBA or less as being "normally acceptable" for residential uses, schools, libraries, churches, and hospitals. This standard also intends to provide for interior noise levels no greater than 45 dBA (Ldn), which is generally accepted as the maximum acceptable noise level for most indoor residential activities. Maximum noise exposure levels acceptable in Los Altos are consistent with the standards in **Table 1**.

In 1974, the state adopted Noise Insulation Standards (Chapter 2-35 of Title 24) for new hotels, motels, and dwellings other than single family detached dwellings. Those standards established 45 dBA (Ldn) as the maximum interior sound level (attributable to exterior sources) in any room. Where exterior sound levels are 60 dBA (Ldn) or above, acoustical analyses for projects are required to ensure that the structure has been designed to limit outside noise to the allowable interior levels.

Title 24 also includes standards to be met for sound transmission between units. Multi-family attached units must incorporate noise reduction features sufficient to assure that interior noise levels in all habitable rooms do not exceed 45 dBA.

Table 1: Land Use Compatibility Standards

Land Use	Community Noise Exposure (Ldn or CNEL)					
	55	60	65	70	75	80
Residential						
Transient Lodging – Motel, Hotel						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Parks						
Golf Course, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial, and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

Source: Modified by CBA from 1998 State of California General Plan Guidelines.

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.

Conditionally Acceptable: New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.

Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.

Clearly Unacceptable: New construction or development should not be undertaken.

Existing Noise Sources in Los Altos

Noise emanates from stationary and mobile sources. Fixed sources include construction, refrigeration units, radio or television, loud speakers, power tools (including leaf flowers), and animals. Mobile noise sources typically are transportation related. In Los Altos, motor vehicles on the City's roadway system are the major source of continuous noise.

The state's planning laws require identification of areas exposed to high noise levels. "Noise exposure areas" are defined as those areas where noise levels exceed 60 dBA (Ldn). In Los Altos, these noise exposure areas exist along some collector streets, minor arterials, and principal arterials with high traffic volumes and relatively high speeds. The distance from the road centerline to points at which noise levels are 80, 75, 70, 65, and 60 dBA have been calculated from the 2001 Average Daily Traffic (ADT) for arterials and collectors throughout Los Altos. Assumptions and results are listed in **Table 2** and shown in **Figure 1**.

No commercial or industrial uses have been identified to be major on-going noise sources for which noise contours need to be prepared.

Projected Future Noise Sources

Growth in and near Los Altos will generate in-creased traffic volumes and thereby increase the exposure to high noise levels. Resulting future noise contours for the year 2025 are shown in **Table 3** and **Figure 2**.

Land use planning, with appropriate noise re-duction mitigation, will establish land use, site, and building design acceptable for new development adjacent to major roadways. Acoustic architectural design, involving site plans, building heights, room arrangements, window size, balcony and courtyard design, and acoustic construction, involving treatment of various parts of a building to reduce interior noise levels, shall be considered in mitigating noise hazards at new developments.

Noise barriers should be considered when other mitigation is infeasible. Ideally, noise barriers will incorporate berms, walls, and ap-propriate landscaping to reduce the visual im-pact of the sound walls.

Certain areas within Los Altos are subject to high noise levels. The primary noise source impacting Los Altos results from transportation-related activities, especially along major transportation corridors. Other noise sources not related to transportation include construction, business operation, recreational activities, and property maintenance. Consideration of the sources and recipients of noise early in the land use planning and development process can be an effective method of minimizing the impact of noise on people in the community. Consideration may be given to reducing noise in areas already impacted by noise through re-habilitative improvements and enforcement of local noise regulations.

Table 2: Distance to Existing CNEL Contour Lines

Roadway/Reach	Speed Limit mph	% Trucks	Average Daily Traffic	CNEL @ 50' from near lane C/L	Distance to Existing Contours From Near Lane Centerline, feet				
		Med/Heavy	2001	2001	60dB	65dB	70dB	75dB	80dB
Almond Avenue:									
E of San Antonio	25	1.8/0.7%	7,380	61.0	62	--	--	--	--
E of Solana	25	1.8/0.7%	6,010	60.0	50	--	--	--	--
Covington Road:									
E of El Monte	25	1.8/0.7%	3,610	58.0	--	--	--	--	--
W of Springer	25	1.8/0.7%	2,670	57.0	--	--	--	--	--
E of Springer	25	1.8/0.7%	5,220	59.5	--	--	--	--	--
E of Miramonte	25	1.8/0.7%	5,910	60.0	50	--	--	--	--
Cristo Rey Drive:									
W of Foothill	30	1.8/0.7%	6,950	64.0	110	--	--	--	--
Cuesta Drive:									
E of El Monte	25	1.8/0.7%	8,540	61.5	69	--	--	--	--
San Antonio - El Monte	25	1.8/0.7%	5,830	60.0	50	--	--	--	--
Distel Drive:									
S of El Camino Real	25	1.8/0.7%	2,190	56.5	--	--	--	--	--
Edith Avenue:									
Los Altos – San Antonio	25	1.8/0.7%	7,210	61.0	62	--	--	--	--
El Monte Avenue:									
S of Foothill Expy.	25	2.0/2.0%	31,180	69.0	255	110	--	--	--
N of Foothill Expy.	25	1.8/0.7%	14,660	64.0	110	--	--	--	--
S of Jay	25	1.8/0.7%	12,290	63.0	90	--	--	--	--
Fallen Leaf Lane:									
N of Fremont	25	1.8/0.7%	1,180	54.0	--	--	--	--	--
S of Fremont	25	1.8/0.7%	2,860	57.5	--	--	--	--	--
N of Homestead	25	1.8/0.7%	1,410	54.5	--	--	--	--	--
Fremont Avenue:									
Miramonte – Grant	35	1.8/0.7%	9,360	65.0	130	50	--	--	--
Grant – Truman	35	1.8/0.7%	17,500	67.5	200	83	--	--	--
E of Truman	35	1.8/0.7%	23,470	69.0	255	110	--	--	--
Granger Avenue:									
N of Grant	25	1.8/0.7%	1,510	55.0	--	--	--	--	--
Grant Road:									
Foothill Exwy. – Morton	25	1.8/0.7%	14,120	63.5	100	--	--	--	--
	25	1.8/0.7%	11,880	63.0	90	--	--	--	--
Morton – Fremont	35	1.8/0.7%	21,370	68.5	235	100	--	--	--
N of Fremont	35	1.8/0.7%	24,200	69.0	255	110	--	--	--
S of North City Limits									
Homestead Road:									
S of Grant	35	1.8/0.7%	4,030	61.5	69	--	--	--	--
W of SR-85	35	1.8/0.7%	15,660	67.0	185	75	--	--	--
Jordan Avenue:									
S of El Camino Real	25	1.8/0.7%	2,890	57.5	--	--	--	--	--

Roadway/Reach	Speed Limit mph	% Trucks	Average Daily Traffic	CNEL @ 50' from near lane C/L	Distance to Existing Contours From Near Lane Centerline, feet				
		Med/Heavy	2001	2001	60dB	65dB	70dB	75dB	80dB
Los Altos Avenue:									
S of El Camino Real	25	1.8/0.7%	5,240	59.5	--	--	--	--	--
Louck – Pine	25	1.8/0.7%	4,540	59.0	--	--	--	--	--
Pine – Edith	25	1.8/0.7%	5,690	60.0	50	--	--	--	--
Edith – Main	25	1.8/0.7%	6,680	60.5	56	--	--	--	--
Main – San Antonio	25	1.8/0.7%	6,590	60.5	56	--	--	--	--
Main Street:									
Los Altos – San Antonio	25	1.8/0.7%	9,710	62.0	75	--	--	--	--
Miramonte Avenue:									
N of Fremont Avenue	25	1.8/0.7%	11,880	63.0	90	--	--	--	--
S of North City Limits	35	1.8/0.7%	11,610	66.0	155	62	--	--	--
Oak Avenue:									
E of Grant	25	1.8/0.7%	2,650	57.0	--	--	--	--	--
Portland Avenue:									
E of Miramonte	25	1.8/0.7%	3,360	58.0	--	--	--	--	--
Saint Joseph Avenue:									
S. of Foothill Exwy	25	1.8/0.7%	5,380	60.0	50	--	--	--	--
San Antonio Road:									
S of El Camino Real	35	2.0/2.0%	29,150	69.5	278	120	--	--	--
Loucks – Almond	35	2.0/2.0%	29,710	70.0	300	130	50	--	--
Almond – Hillview	35	2.0/2.0%	32,000	70.0	300	130	50	--	--
Hillview – Foothill Exwy	35	2.0/2.0%	20,970	68.5	235	100	--	--	--
Sherwood Avenue:									
E of San Antonio	25	1.8/0.7%	2,460	56.5	--	--	--	--	--
Springer Road:									
N of Foothill Exwy.	30	1.8/0.7%	12,930	65.5	143	56	--	--	--
S of El Monte	30	1.8/0.7%	8,990	64.0	110	--	--	--	--
Truman Avenue:									
N of Fremont	25	1.8/0.7%	4,800	59.5	--	--	--	--	--
S of Fremont	25	1.8/0.7%	380	50.0	--	--	--	--	--
University Avenue:									
W of El Monte	25	1.8/0.7%	3,040	57.5	--	--	--	--	--
SR-82:									
S of El Monte	35	3.5/0.5%	46,500	71.0	340	155	62	--	--
N of El Monte	35	3.5/0.5%	46,500	71.0	340	155	62	--	--
S of San Antonio	35	3.5/0.5%	44,500	71.0	320	143	56	--	--
N of San Antonio	35	3.5/0.5%	49,700	71.0	340	155	62	--	--
SR-85:									
I-280 – Homestead	65	1.6/1.6%	118,000	75.0	600	300	130	50	--
Homestead – Fremont	65	1.6/1.6%	125,000	75.0	600	300	130	50	--
Fremont – SR-82	65	2.5/2.0%	116,000	75.0	600	300	130	50	--
I-280:									
SF-85 – Foothill	65	1.9/1.4%	142,000	82.0	1,250	760	395	185	75
Foothill – Magdelena	65	1.9/1.4%	127,000	75.5	640	320	143	56	--

Roadway/Reach	Speed Limit mph	% Trucks	Average Daily Traffic	CNEL @ 50' from near lane C/L	Distance to Existing Contours From Near Lane Centerline, feet				
		Med/Heavy	2001	2001	60dB	65dB	70dB	75dB	80dB
Foothill Expressway:				(1)	(1)	(1)	(1)		
Homestead –	45	2.0/2.0%	40,540	69/73	--	--	--	--	--
Arboretm	45	2.0/2.0%	40,540	69/73	95/140	74/90	--/69	--	--
Arboretm – Grant	45	2.0/2.0%	40,540	69/73	255/140	110/90	--/69	--	--
Grant – Fremont	45	2.0/2.0%	40,540	73	460	215	90/--	--	--
Fremont – Springer	45	2.0/2.0%	40,540	69/73	255/460	110	90/--	--	--
Springer – El Monte	45	2.0/2.0%	40,540	69/73	255/460	110	90/--	--	--
El Monte – San	45	2.0/2.0%	40,540	69/73	255/140	110/90	--/69	--	--
Antonio	45	2.0/2.0%	40,540	69/73	460/140	--/90	--/69	--	--
San Antonio – Main	45	2.0/2.0%	40,540	69/73	195/140	--/90	--/69	--	--
Main – Edith									
Edith to Arastadero									

Source: Weiland Associates, Inc. 2001
(1) numbers in this section represent the west/east sides of the road segment.

Figure 1: Existing Noise Contours

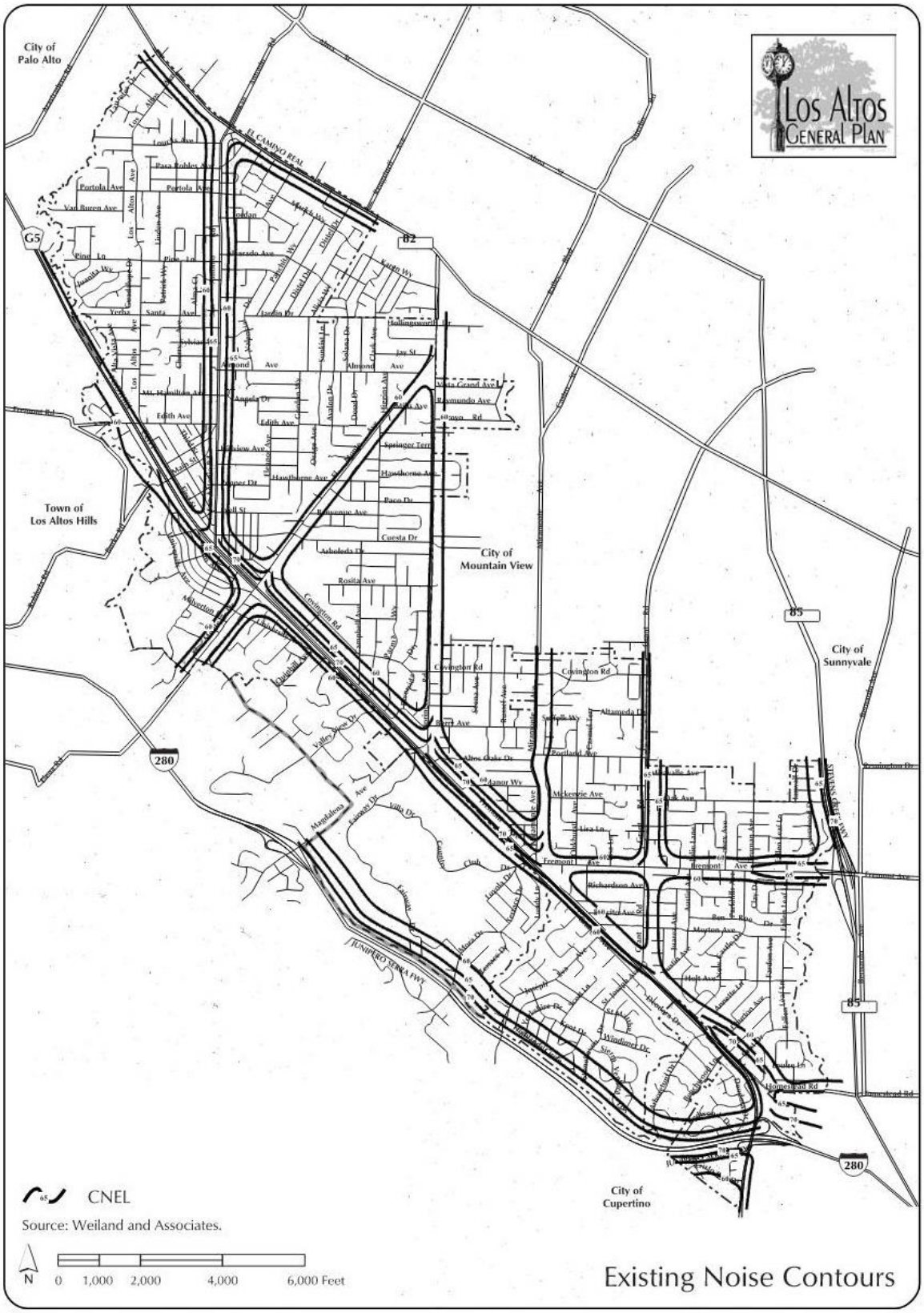


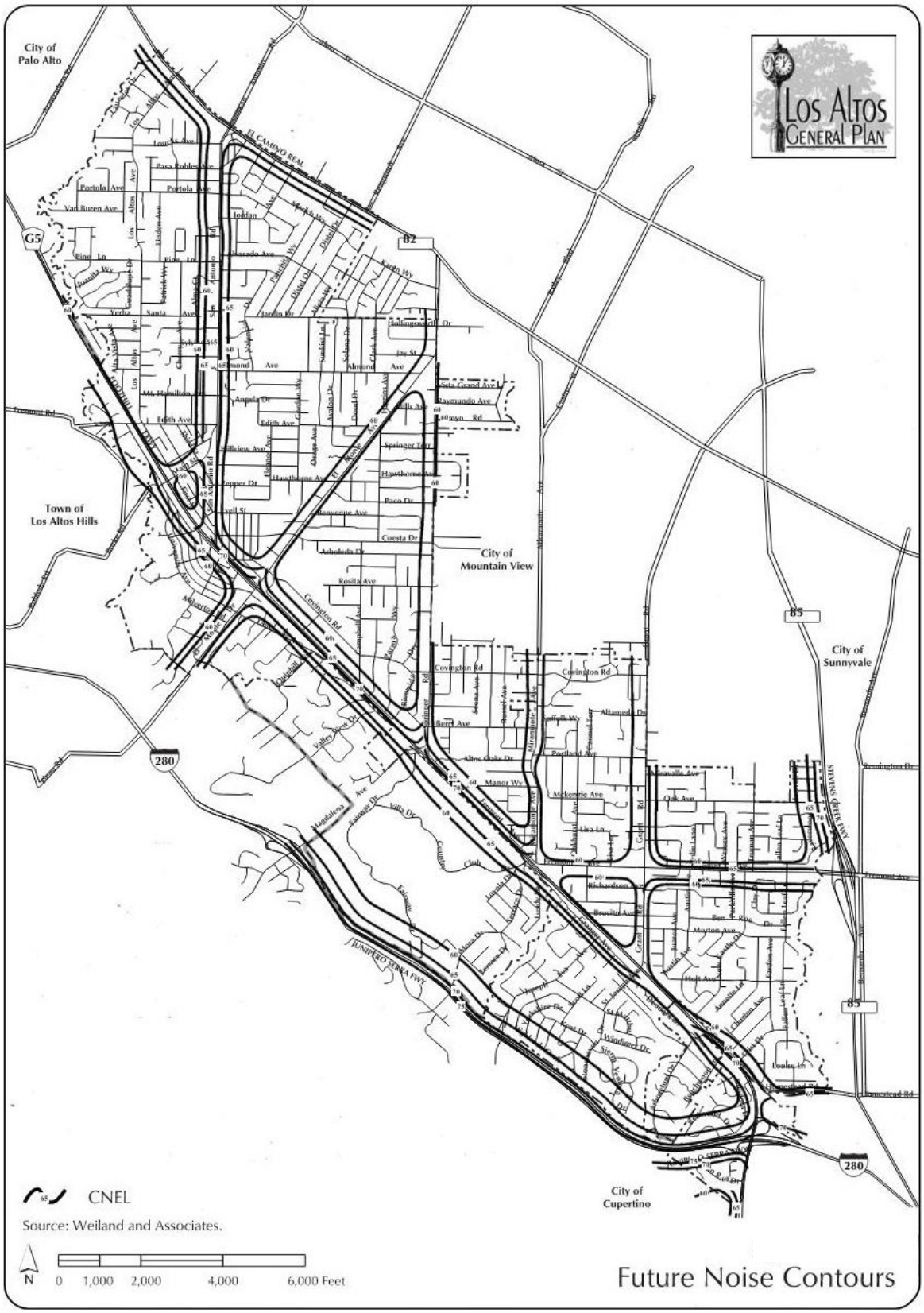
Table 3: Distance to Future CNEL Contour Lines

Roadway/Reach	Speed Limit mph	% Trucks	Average Daily Traffic	CNEL @ 50' from near lane C/L	Distance to Future Contours From Near Lane Centerline, feet				
		Med/Heavy	2025	2025	60dB	65dB	70dB	75dB	80dB
Almond Avenue:									
E of San Antonio	25	1.8/0.7%	8,920	62.0	75	--	--	--	--
E of Solana	25	1.8/0.7%	7,270	61.0	62	--	--	--	--
Covington Road:									
El Monte - Fremont	25	1.8/0.7%	6,780	60.5	56	--	--	--	--
Riverside - Springer	25	1.8/0.7%	3,020	57.5	--	--	--	--	--
Springer - Spencer	25	1.8/0.7%	5,850	60.0	50	--	--	--	--
Thatcher - Eastwood	25	1.8/0.7%	6,670	60.5	56	--	--	--	--
Cristo Rey Drive:									
Foothill - Friar	35	1.8/0.7%	7,090	64.0	110	--	--	--	--
Cuesta Drive:									
Clark - Springer	25	1.8/0.7%	9,650	62.0	75	--	--	--	--
El Monte - Gabilan	25	1.8/0.7%	6,590	60.5	56	--	--	--	--
Distel Drive:									
ECR - Distel	25	1.8/0.7%	2,230	56.5	--	--	--	--	--
Edith Avenue:									
Third - View	25	1.8/0.7%	8,830	61.5	69	--	--	--	--
El Monte Avenue:									
University - Milverton	25	2.0/2.0%	35,220	69.5	278	120	--	--	--
Giffin - Shirlynn	25	1.8/0.7%	16,580	64.5	120	--	--	--	--
Jay - Almond	25	1.8/0.7%	13,890	63.5	100	--	--	--	--
Fallen Leaf Lane:									
Fremont - Brookmill	25	1.8/0.7%	1,440	54.5	--	--	--	--	--
Fremont - Alexander	25	1.8/0.7%	3,410	58.0	--	--	--	--	--
Homestead - Marshall	25	1.8/0.7%	1,470	55.0	--	--	--	--	--
Fremont Avenue:									
Grant - Lisa	35	1.8/0.7%	10,560	65.5	130	50	--	--	--
Grant - Siesta	35	1.8/0.7%	19,770	68.0	200	83	--	--	--
Fallen Leaf - Stevens Creek	35	1.8/0.7%	26,580	69.5	255	110	--	--	--
Granger Avenue:									
St Joseph - Sandalwood	25	1.8/0.7%	1,570	55.0	--	--	--	--	--
Grant Road:									
Foothill Exwy. – Morton	25	1.8/0.7%	15,970	64.0	110	--	--	--	--
Fremont - Richardson	25	1.8/0.7%	13,430	63.5	100	--	--	--	--
Fremont - Garthwick	35	1.8/0.7%	24,150	69.0	255	110	--	--	--
Covington - Levin	35	1.8/0.7%	27,340	69.5	278	120	--	--	--
Homestead Road:									
S of Grant	35	1.8/0.7%	4,190	62.0	75	--	--	--	--
Fallen Leaf – Stevens Creek	35	1.8/0.7%	16,910	67.5	200	83	--	--	--
Jordan Avenue:									
ECR - Marich	25	1.8/0.7%	3,010	57.5	--	--	--	--	--
Los Altos Avenue:									
ECR - Santa Rita	25	1.8/0.7%	7,220	61.0	62	--	--	--	--
Pine - Spagnoli	25	1.8/0.7%	6,520	60.5	56	--	--	--	--
W. Edith - Mt Hamilton	25	1.8/0.7%	7,050	61.0	62	--	--	--	--

Roadway/Reach	Speed Limit mph	% Trucks	Average Daily Traffic	CNEL @ 50' from near lane C/L	Distance to Future Contours From Near Lane Centerline, feet				
		Med/Heavy	2025	2025	60dB	65dB	70dB	75dB	80dB
Main Street:									
Foothill Exwy. - First	25	1.8/0.7%	9,710	62.0	75	--	--	--	--
Miramonte Avenue:									
A - B	25	1.8/0.7%	13,540	63.5	100	--	--	--	--
Covington - Alegre	35	1.8/0.7%	13,120	66.5	170	69	--	--	--
Oak Avenue:									
Grant - Braddale	25	1.8/0.7%	2,760	57.0	--	--	--	--	--
Portland Avenue:									
Grant - Carvo	25	1.8/0.7%	4,050	58.5	--	--	--	--	--
Saint Joseph Avenue:									
Deodora - Stonehaven	25	1.8/0.7%	5,490	60.0	50	--	--	--	--
San Antonio Road:									
ECR - Loucks	35	2.0/2.0%	35,970	70.5	320	143	56	--	--
Pine - Arbuelo	35	2.0/2.0%	36,830	70.5	320	143	56	--	--
Edith - Mt. Hamilton	35	2.0/2.0%	39,000	71.0	340	155	62	--	--
Pepper - Hawthorn	35	2.0/2.0%	23,790	69.0	255	110	--	--	--
Sherwood Avenue:									
San Antonio - Acacia	25	1.8/0.7%	2,930	57.5	--	--	--	--	--
Springer Road:									
Berry to Fremont	30	1.8/0.7%	14,620	66.0	155	62	--	--	--
Vista Grande– El Monte	30	1.8/0.7%	10,160	64.5	120	--	--	--	--
Truman Avenue:									
Fremont - Wakefield	25	1.8/0.7%	4,990	59.5	--	--	--	--	--
University Avenue:									
El Monte - Edgewood	25	1.8/0.7%	3,430	58.0	--	--	--	--	--
SR-82:									
S of El Monte	35	3.5/0.5%	52,000	71.5	368	170	69	--	--
N of El Monte	35	3.5/0.5%	52,000	71.5	368	170	69	--	--
S of San Antonio	35	3.5/0.5%	50,000	71.0	340	155	62	--	--
N of San Antonio	35	3.5/0.5%	56,000	71.5	368	170	69	--	--
SR-85:									
I-280 – Homestead	65	1.6/1.6%	130,000	75.5	640	320	143	56	--
Homestead – Fremont	65	1.6/1.6%	137,000	75.5	640	320	143	56	--
Fremont – SR-82	65	2.5/2.0%	128,000	75.5	640	320	143	56	--
I-280:									
SF-85 – Foothill	65	1.9/1.4%	156,000	82.5	1,325	810	428	200	82.5
Foothill – Magdelena	65	1.9/1.4%	139,000	78.0	860	460	215	90	--
Foothill Expressway:				(1)	(1)	(1)	(1)		
Homestead – Arboretm	45	2.0/2.0%	40,540	69/73	255/460	110/215	-/90	--	--
Arboretm – Grant	45	2.0/2.0%	40,540	69/73	95/140	74/90	--/69	--	--
Grant – Fremont	45	2.0/2.0%	40,540	69/73	255/140	110/90	--/69	--	--
Fremont – Springer	45	2.0/2.0%	40,540	73	460	215	90/--	--	--
Springer – El Monte	45	2.0/2.0%	40,540	69/73	255/460	110	90/--	--	--
El Monte – San Antonio	45	2.0/2.0%	40,540	69/73	255/460	110	90/--	--	--
San Antonio – Main	45	2.0/2.0%	40,540	69/73	255/140	110/90	--/69	--	--
Main – Edith	45	2.0/2.0%	40,540	69/73	460/140	--/90	--/69	--	--
Edith to Arastadero	45	2.0/2.0%	40,540	69/73	195/140	--/90	--/69	--	--

Source: Weiland Associates, Inc. 2001
(1) numbers in this section represent the west/east sides of the road segment.

Figure 2: Future Noise Contours



Air Quality

The City of Los Altos is located within the Bay Area Air Quality Management District (BAAQMD). The district is governed by a 21-member Board of Directors, responsible for developing and enforcing regulations to control air pollution. Air pollutants regulated by the district include:

- Particulate matter;
- Organic compounds;
- Nitrogen oxides;
- Sulfur dioxide/oxides;
- Carbon monoxide;
- Hydrogen sulfide;
- Photochemical smog; and
- Acid deposition.

The generation of air pollutants degrade the air quality and can pose a significant health hazard. Air pollutants are closely linked to land use, transportation, and energy use planning. Daily automobile travel from suburban areas to the employment centers of Santa Clara County is the primary cause of air pollution in the subregion. Planning that can reduce the overall vehicle miles traveled (VMT) will also reduce the amount of air pollutants generated. In addition, air movement patterns in the Bay Area carry air pollutants from north to south. The Santa Clara Valley thereby receives the accumulated air pollution from its neighbors to the north.

The Bay Area experienced 12 days of ozone non-attainment in 2000, down from 20 days in 1999. The monitoring station in Mountain View near Los Altos registered seven days of ozone non-attainment in 1999 and the monitoring station was out of service in 2000. Unless federal legislation is changed, non-compliance with federal standards means that the Environmental Protection Agency will cease funding for clean-up of air pollution, ban construction of wastewater treatment facilities, and cease highway funding.

Air pollution problems in Los Altos are a result of activities in the entire Bay region and cannot be solved at the local level. However, through appropriate land use, transportation, and energy use planning, the City can participate in the most feasible remedies.

Cooperation among all agencies in the BAAQMD is necessary to achieve desired improvements to air quality. Los Altos can participate and contribute its share in those efforts by proper planning for land use and transportation consistent with the most recent Air Quality Management Plan.

ISSUES, GOALS AND POLICIES

Certain natural conditions and human activities in Los Altos create risks to individuals and property within the community. Excessive risk and impact from such hazards can be reduced or avoided through implementation of the Natural Environment & Hazards Element.

Major issues addressed by the goals, policies, and plan of the Natural Environment & Hazards Element are as follows:

1) Minimizing impacts associated with stationary and transportation-related noise sources; and

2) Reducing impacts associated with air pollutants.

Noise

Certain areas within Los Altos are subject to high noise levels. The primary noise source impacting Los Altos results from transportation-related activities, especially along major transportation corridors. Other noise sources not related to transportation include construction, business operation, recreational activities, and property maintenance. Consideration of the sources and recipients of noise early in the land use planning and development process can be an effective method of minimizing the impact of noise on people in the community. Consideration may be given to reducing noise in areas already impacted by noise through rehabilitative improvements and enforcement of local noise regulations.

Goal 7:

Minimize the amount of noise to which the community is exposed and the amount of noise created by future development and urban activities.

Policy 7.1: Ensure that new development can be made compatible with the noise environment by utilizing noise/land use compatibility standards and the Noise Contours Map as a guide for future planning and development decisions.

Policy 7.2: Enforce the following maximum acceptable noise levels for new construction of various noise-sensitive uses in an existing noise environment.

- 60 dBA CNEL is the maximum acceptable outdoor noise exposure level for single-family residential areas.
- 65 dBA CNEL is the maximum acceptable outdoor noise exposure level for multiple-family residential areas.
- 70 dBA CNEL is the maximum acceptable outdoor noise exposure level for schools (public and private), libraries, churches, hospitals, nursing homes, parks, commercial, and recreation areas. Excepted from these standards are golf courses, stables, water recreation, and cemeteries.

Policy 7.3: Work to achieve indoor noise levels not exceeding 45 dBA CNEL in the event that outdoor acceptable noise exposure levels cannot be achieved by various noise attenuation mitigation measures.

Policy 7.4: Consider the potential impact on the general noise level when planning changes and improvements to the circulation system.

Policy 7.5: Require reasonable mitigation measures to reduce noise levels to those

determined to be acceptable in the event that significant increased noise levels will result from an improvement to the circulation system.

Policy 7.6: Consider noise attenuation measures to reduce noise levels to City-adopted acceptable levels for any development along roadways.

Policy 7.7: Require the inclusion of design features in development and reuse/revitalization projects to reduce the impact of noise on residential development.

Policy 7.8: Require an acoustical analysis for new construction and in areas with a higher than established noise levels.

Policy 7.9: Minimize stationary noise sources and noise emanating from construction activities.

Policy 7.10: Publicize and enforce local noise regulations to reduce nuisance noises related to private developments and residences.

Air Quality

Los Altos is located within the Bay Area Air Quality Management District, which is considered a non-attainment air basin since it exceeds some of the allowable levels for various air pollutants. Cooperation among all agencies in the district is necessary to achieve desired improvements to air quality. Los Altos can participate and contribute its share in those efforts by proper planning for land use and transportation.

Goal 8:

Maintain or improve air quality in Los Altos.

Policy 8.1: Support the principles of reducing air pollutants through land use, transportation, and energy use planning.

Policy 8.2 Encourage transportation modes that minimize contaminant emissions from motor vehicle use.

Policy 8.3: Interpret and implement the General Plan to be consistent with the regional Bay Area Air Quality Management Plan, as periodically updated.

Policy 8.4: Ensure location and design of development projects so as to conserve air quality and minimize direct and indirect emissions of air contaminants.

IMPLEMENTATION PROGRAMS APPENDIX

The Implementation Programs Appendix provides a guide to implement adopted General Plan policies and plans for City elected officials, staff and the public. The purpose of the Implementation Programs are to ensure the overall direction provided in the General Plan for City growth and development is translated from general terms to specific actions.

Each implementation program is a measure, procedure, or technique that requires additional City action. This action may either occur on a City-wide basis or in specific areas within the City. The City Council, by relating the Implementation Programs to the General Plan, recognizes the importance of long-range planning considerations in day-to-day decision making and budgeting. Implementation of the specific program.

Use of the General Plan Implementation Program

The Implementation Programs are intended for use in preparing the Annual Report to the City Council on the status of the City's progress in implementing the General Plan, as described in Section 65400 of the California Government Code. Because some of the individual actions and programs described in the Implementation Programs Appendix act as mitigation for significant environmental impacts resulting from planned development identified in the General Plan, the annual report can also provide a means of monitoring the application of the mitigation measures as required by Section 15097 of the State CEQA Guidelines. This Implementation Programs Appendix may be updated annually with the budget process and whenever the City's General Plan is amended or updated to ensure continued consistency and usefulness.

Natural Environment & Hazards

Ensure that new development is exposed to a This Implementation Program provides actions to implement the adopted policies and plans identified in the Natural Environment & Hazards Element. The Natural Environment & Hazards Implementation Program is a series of actions, procedures and techniques which includes a description of the responsible agency/department, funding source, time frame and related policies in the Natural Environment & Hazards Element.

Noise

NEH 21: Compatible Development

Use noise and land use compatibility standards to guide future planning and development decisions. Table 1 in the Noise and Air Quality Element summarizes the standard for acceptable noise levels by land use types. Review development proposals to ensure that the City's noise standards and compatibility criteria are met. Require mitigation measures, where necessary, to reduce noise levels to meet these standards and criteria.

Responsible Agency/Department: Community Development
Funding Source: Development fees
Time Frame: Ongoing
Related Policies: NEH 7.1

NEH 22: Acceptable Noise Levels for New Development

Ensure that new development is exposed to acceptable noise levels. Require acoustical analyses for all for all proposed development within the 60 dB CNEL contour as shown on **Table 3**, Future Noise Contours in the Natural Environment & Hazards Element. Also require acoustical analyses for selected proposed residential projects in the vicinity of existing and proposed commercial areas that may generate excessive noise. Where the noise analyses indicates that the City's noise standards will be exceeded, require noise control measures to be incorporated into the proposed development to reduce noise to acceptable levels. Noise control measures may include berms, walls, and sound attenuating architectural design and construction methods. Only permit new development if the noise standards and the City's Noise Ordinance can be met.

Responsible Agency/Department: Community Development
Funding Source: Development fees
Time Frame: Ongoing
Related Policies: NEH 7.2

NEH 23: Noise Insulation Standards

Enforce the provisions of the State of California Noise Insulation Standards (Title 24) that specify that indoor noise levels for multi-family residential living spaces shall not exceed 45 dB CNEL. The Title 24 noise standard is defined as the combined effect of all noise sources and is implemented when existing or future exterior noise levels exceed 60 dB CNEL. **Table 3**, Future Noise Contours, will be used to determine where exterior noise levels exceed 60 dB CNEL. Title 24 requires that the standard be applied to all new hotels, motels, apartment houses and dwellings other than single-family dwellings. Also apply the standard to single-family dwellings and condominium conversion projects as official policy.

Responsible Agency/Department: Community Development
Funding Source: Development Fees
Time Frame: Ongoing
Related Policies: NEH 7.3

NEH 24: Noise Ordinance Implementation and Enforcement

Implement and enforce the City's Noise Ordinance to protect residents from excessive noise levels.

Responsible Agency/Department: Community Development, Public Works, Police
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: NEH 7.10

NEH 25: Reduce Roadway Noise

Reduce noise impacts from transportation activity to enhance the quality of the community. Incorporate noise control measures, such as sound walls and berms, into roadway improvement projects to mitigate impacts to adjacent development. Request Caltrans and the Santa Clara County Transportation Agencies to provide noise control for roadway projects within the Planning Area. Particularly advocate reducing noise impacts from the list of major noise sources.

Responsible Agency/Department: Public Works, Community Development
Funding Source: General Fund, development fees, gas tax revenues
Time Frame: Ongoing
Related Policies: NEH 7.5, NEH 7.6

NEH 26: Minimize Vehicle, Bus and Truck Noise

Coordinate with the Police Department, Santa Clara County Sheriffs Department and the California Highway Patrol to enforce the California Vehicle Code pertaining to noise standards for cars, trucks and motorcycles. Periodically review truck and bus routes in the Planning Area for noise impacts to residential and other sensitive land uses. Where noise impacts are identified from truck traffic, modify the designated truck routes to avoid impacts. Where impacts are identified from bus traffic, recommend alternative routes to the Santa Clara County Transportation Authority.

Responsible Agency/Department: Public Works, Police
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: NEH 7.5, NEH 7.6

NEH 27: Minimize Commercial Noise

Amend the City Noise Ordinance to limit delivery hours for stores with loading areas or docks that front, side, border or gain access on driveways next to residential and other noise sensitive areas. Only approve exceptions if full compliance with the nighttime limits of the noise ordinance is achieved.

Responsible Agency/Department: Community Development
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: NEH 7.8, NEH 7.9

NEH 28: Minimize Construction Noise

Require all construction activity to comply with the limits established in the City Noise Ordinance.

Responsible Agency/Department: Community Development
Funding Source: Development fees
Time Frame: Ongoing
Related Policies: NEH 7.9

Air Quality

NEH 29: Minimize Impacts of New Development

Review development proposals for potential impacts pursuant to CEQA and the BAAQMD Air Quality Handbook. Reduce impacts of new development using available land use and transportation planning techniques such as:

1) Incorporation of public transit stops;
2) Pedestrian and bicycle linkage to commercial centers, employment centers, schools, and parks;
3) Preferential parking for car pools;
4) Traffic flow improvements; and
5) Employer trip reduction programs.

Responsible Agency/Department: Community Development, Public Works
Funding Source: Development fees
Time Frame: Ongoing
Related Policies: NEH 8.1, NEH 8.4

NEH 30: Participation in Regional Air Quality Programs

Work with the BAAQMD and ABAG and to meet federal and State air quality standards for all pollutants. To ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the BAAQMP.

Responsible Agency/Department: Community Development, Public Works
Funding Source: General Fund, BAAQMD Revenue
Time Frame: Ongoing
Related Policies: NEH 8.1, NEH 8.2, NEH 8.3